

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



**STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

In the Matter of:	)	Docket No. 99-AFC-7C
	)	Order No. 01-0613-1(a)
Pastoria Energy Facility)	
)	
Petition for the Transfer of Ownership	)	COMMISSION ORDER APPROVING
from the Pastoria Energy Facility, LLC	)	OWNERSHIP TRANSFER
(Enron) to the Pastoria Energy Center,)	
LLC (Calpine))	

On May 23, 2001, the Pastoria Energy Center, LLC, submitted a Petition to transfer ownership of the Pastoria Energy Facility from the Pastoria Energy Facility, LLC (Enron North America) to the Pastoria Energy Center, LLC, an affiliate of the Calpine Corporation. The Petition was filed in accordance with section 1769(b) of the Energy Commission's regulations [Title 20, California Code of Regulations, section 1769(b)].

COMMISSION FINDINGS

The Energy Commission finds that the Pastoria Energy Center, LLC, Petition satisfies the requirements of section 1769(b). The Pastoria Energy Center, LLC, an affiliate of the Calpine Corporation, will be responsible for compliance with the Commission's conditions of certification, and Jacob M. Rudisill, Senior Vice President of Pastoria Energy Center, LLC, has filed the required verified statement that he understands the conditions of certification and agrees to comply with those conditions.

ORDER

The Energy Commission hereby approves the ownership transfer of the Pastoria Energy Facility to the Pastoria Energy Center, LLC, effective on the date of closing.

Dated:	STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
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WILLIAM J. KEESE
Chairman

CALIFORNIA ENERGY COMMISSION

16 NINTH STREET
ACRAMENTO, CA 95814-5512



March 26, 2001

Mr. Samuel Wehn, Director
PASTORIA ENERGY FACILITY, LLC
101 California Street, Suite 1950
San Francisco, CA 94111

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Project Change
SOIL & WATER 5, Back-up Water Supply Clarification

Dear Mr. Wehn:

California Energy Commission (Energy Commission) staff reviewed your petition dated March 16, 2001, requesting that Condition of Certification SOIL & WATER 5 be modified to clarify the source of the back-up water supply to serve the Pastoria Energy Facility. As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we have expedited review of this proposed project modification because the statutes and implementing regulations that normally apply to review and approval of this amendment have been suspended. A copy of this letter will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse.

Energy Commission staff concluded that modification of the December 20, 2000 Commission Decision for the Pastoria Energy Facility (99-AFC-7C), Condition of Certification SOIL & WATER 5, *as specified below*, has no potential for adverse environmental or public health and safety impacts and is approved as follows (eliminated text is shown in ~~strikeout~~ and new text is shown in underline):

"SOIL & WATER 5: Water used for project operation shall be SWP water as obtained from the WRMWSD excess water sold through the district's pool or ~~Westside's groundwater~~ banked water from KWB that is directly delivered or exchanged for SWP surface water. If no such water is available, the PEF will not operate until such time as the Energy Commission has approved an amendment allowing for the use of an alternative supply or cooling technology.

Verification: The project owner, in the annual compliance report, shall provide a water accounting summary that states the source and quantity of water used at PEF on a monthly basis. The report shall indicate whether the water is obtained through the WRM's ~~WRMWSD's~~ district pool, direct pumping of KWB ~~groundwater~~ banked water for delivery to PEF or the result of surface water exchanges."

Samuel Wehn
March 26, 2001
Page 2

If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

ROBERT L. THERKELSEN, Deputy Director
for Systems Assessment and Facilities Siting

cc: Larry Johns, Wheeler Ridge-Maricopa Water Storage District
Nancy Tronaas, Energy Commission
Lorraine White, Energy Commission

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



June 19, 2001

Mr. Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY, LLC
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Approval of 15-Acre Expansion of Construction Laydown Yard
Pastoria Energy Facility (99-AFC-7C)
Changes to Conditions of Certification BIO-05, BIO-08, and BIO-10

Dear Mr. Salzmann:

California Energy Commission (Energy Commission) staff reviewed your petition dated May 29, 2001, requesting a 15-acre expansion of the construction laydown yard for the Pastoria Energy Facility. As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we have expedited review of this proposed project modification because statutes and implementing regulations that normally apply to review and approval of this amendment have been suspended. Energy Commission staff have concluded that, subject to minor revisions to the Commission Decision Conditions of Certification **BIO-05**, **BIO-08** and **BIO-10** as described in the enclosed staff analysis, the 15-acre expansion has no potential for adverse environmental or public health and safety impacts.

Therefore, you are authorized to proceed with the project modifications as requested, subject to compliance with the revised Conditions of Certification **BIO-05**, **BIO-08**, and **BIO-10**. A copy of this letter and staff analysis will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

Enclosure

cc: Peter Cross, USFWS
Donna Daniels, CDFG
Greg Fenton, Kern County Engineering Services Division
Nancy Tronaas, Energy Commission
Jim Brownell, Energy Commission

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



June 28, 2001

Mr. Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY, LLC
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Project Changes: Site Reconfiguration
New Condition of Certification TRANS-9

Dear Mr. Salzmann:

California Energy Commission (Energy Commission) staff reviewed your petition received on June 8, 2001 for the Pastoria Energy Facility for the following project changes: general site reconfiguration, reduction in heat recovery steam generator stack height, refined turbine performance/steam injection power augmentation, modification of the fuel gas supply pipeline route, and an increase in construction workforce. As requested by Jennifer Scholl of URS on June 21, 2001, our review does not include the conversion from aqueous to anhydrous ammonia, which will be evaluated under a separate amendment petition.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we have expedited review of this proposed project modification. Energy Commission staff have concluded that, subject to the addition of a new Condition of Certification, **TRANS-9** (enclosed), the proposed project changes have no potential for adverse environmental or public health and safety impacts.

Therefore, you are authorized to proceed with the project modifications as requested, subject to compliance with the Condition of Certification **TRANS-9**. A copy of this letter and staff analysis will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

Enclosure

cc: Greg Fenton, Kern County Engineering Services Division
Jennifer Scholl, URS
Nancy Tronaas, Energy Commission
Eileen Allen, Energy Commission

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



July 23, 2001

Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: PASTORIA ENERGY FACILITY (99-AFC-7C)
APPROVAL OF VERIFICATION CHANGES: BIO-10 and BIO-12

Dear Mr. Salzmann:

The California Energy Commission (Energy Commission) staff has considered your request for an extension of the submittal timeframe for biological resources Conditions of Certification BIO-10 and BIO-12 concerning the provision of the signed Open Space Easement Deed to protect the San Joaquin kit fox movement corridor. We understand that you are very close to completing the agreement, and should be able to provide the signed agreement by the end of this month. In order to allow the project to commence site grading, and still assure compliance with the conditions of certification, Energy Commission staff approves the following changes to the compliance verifications for BIO-10 and BIO-12 (deleted text is shown in ~~strikethrough~~ and new text is underlined:

BIO-10 (Biological Resources Mitigation Implementation and Monitoring Plan):

"Verification: At least 60 days prior to start of any project-related ground disturbance activities, and no later than July 31, 2001 for #14 concerning the signed open space easement deed and map, the project owner shall provide the CPM with the final version of the BRMIMP, and the CPM will determine....."

BIO-12 (Open Space Easement Deed):

"Verification: ~~At least 60 days prior to start of any project-related ground disturbance activities~~ No later than July 31, 2001, the project owner shall provide the CPM with the final approved version of the BRMIMP and a copy of the signed easement deed. A copy of the project owner/Tejon Ranch map identifying the area addressed by the deed, shall also be included in the final BRMIMP."

If you have any questions, please call me at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

Nancy Tronaas
Compliance Project Manager

cc: Peter Cross, U.S. Fish & Wildlife Service
Raymond Rodriguez, Pastoria Energy Facility
Rick York, Energy Commission

CALIFORNIA ENERGY COMMISSION

516 NINTH STREET
SACRAMENTO, CA 95814-5512



STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

In the Matter of:	)	Docket No. 99-AFC-7C
	)	Order No. 01-0725-02
PASTORIA ENERGY FACILITY)	
)	
Petition for Proposed Modifications:)	
Conversion from Aqueous to Anhydrous	)	COMMISSION ORDER APPROVING
<u>Ammonia</u>	)	PROJECT MODIFICATIONS
)	

On June 28, 2001, the Pastoria Energy Facility, LLC, submitted a Petition to convert from aqueous to anhydrous ammonia to control facility emissions.

The Commission approves the proposed amendment and the proposed modified conditions in accordance with Title 20, section 1769(a)(3) of the California Code of Regulations.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed changes.
- B. The facility will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources code section 25525.
- C. The change will be beneficial to the project owner to decrease truck deliveries and increase operational efficiency and improve maintainability of the power plant.
- D. The proposed amendment to convert to anhydrous ammonia was a post-certification business decision made by the new project owners.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts the following changes to the Pastoria Energy Facility Decision (added text is underlined, deleted text is shown as ~~striketrough~~):

*CHANGES TO EXISTING CONDITIONS OF CERTIFICATION:***(Facility Design, GEN-4)****Table 1: Major Equipment List**

Equipment/System	Quantity Plant	Size/ Capacity*	Remarks
Combustion Turbine (CT) Generator	3	168 MW each	Dry Low NO _x combustion control
Steam Turbine (ST)	2	185/90 MW	Single shaft HPT, IPT and LPT (2x1 configuration and 1x1 configuration)
Generators	5		Included with CT and ST
CT Inlet Air Filter	3	3,600,000 lb/hr	
Inlet Air Cooling	3		Evaporative/Refrigeration/Fogging
Fuel Gas Filter – Separator	3	150,000 lb/hr	
Turbo expander	1	230,000 lb/hr	
Heat Recovery Steam Generator (HRSG)	3	550,000 lb/hr	HP, IP, LP with reheat
HRSG Stack	3		18'-0" dia.x213' high
Catalytica CO Emission Control	3		Achieve BACT/LAER
Catalytica NO _x Emission Control	3		Achieve BACT/LAER
Ammonia Injection Skid	3		Two blowers per HRSG-alternate
<u>Aqueous Anhydrous</u> Ammonia Storage Tank	3	12,000 gal	Double walled tanks – alternate, for NO _x control
HP/IP HRSG feed-water pumps	6	1,700 gpm	HP with interstage bleed
Make-up Water Clarifier	1	5,6000 gpm	Gravity flow
Make-up Water Storage Tank	1	2,300,000 gal	Includes firewater storage
Demineralized Water Pumps	3	170 gpm	
Demineralized Water Treatment Package	1	350 gpm	
Demineralized Water Storage Tank	1	150,000 gal	
Condensate Pumps	5	1300 gpm	1 spare per condenser
Circulating Water Pumps	6	60,000 gpm/ 30,000 gpm	2x1 Configuration/1x1 Configuration
Wet Cooling Tower Banks	2	1.100mm BTU/hr / 600 mm BTU/hr	2x1 Configuration/1x1 Configuration
Fire Water Pump Skid	1	3,000 gpm	
Auxiliary Cooling Water Pumps	3	750 gpm	
Plant Air Compressors & Dryers	2	750 cfm	
Step-up Transformers	4	18/20 kV	To electrical grid
Emergency Backup Standby Generator	1	66 kW	Natural Gas Fired

*All capacities and sizes are approximate and may change during project final design.

HAZ-2 The project owner shall provide a Business Plan and Risk Management Plan to the Kern County Environmental Health Department and the CPM for review and approval. The RMP shall be submitted to the CPM at the time the RMP is first submitted to either Kern County or the U.S. Environmental Protection Agency (EPA). The project owner shall reflect all recommendations of the Kern County Environmental Health Department and the CPM in the final document.

A copy of the final RMP, reflecting all comments, shall be provided to Kern County and the CPM once it is deemed complete.

Verification: At least 60 days prior to handling reportable quantities of any hazardous material the owner shall provide a copy of a final Business Plan approved by Kern County to the CPM. At least 60 days prior to delivery of ~~aqueous~~ anhydrous ammonia to the PEF project the owner shall provide the final RMP accepted by Kern County, to the CPM for approval.

HAZ-3 The project owner shall develop and implement a safety management plan for delivery of ammonia. The plan shall include procedures, protective equipment requirements, training and a checklist.

Verification: At least sixty days prior to the delivery of ~~aqueous~~ anhydrous ammonia to the facility, the project owner shall provide a safety management plan as described above to the CPM for review and approval.

HAZ-4 The ~~aqueous~~ anhydrous ammonia storage tanks shall be constructed to specifications at least as protective as those in ~~American Petroleum Institute (API) 620~~ American National Standards Institute (ANSI) K61.1. The storage tank shall be double walled design or be within a secondary containment designed and operated to hold the volume of precipitation from a 24-hour, 25-year storm event plus 100 percent of the capacity of the largest tank within its boundary.

Verification: At least 60 days prior to delivery of ~~aqueous~~ anhydrous ammonia to the site, the project owner shall submit final design drawings and specifications for the ammonia storage facility to the CPM for review and approval.

IT IS SO ORDERED.

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

DATE

WILLIAM J. KEESE, Chairman

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



August 9, 2001

Mr. Fred Salzmann, Project Manager
Pastoria Energy Facility
P.O. Box 866
Lebec, CA 93243

SUBJECT: PASTORIA POWER PLANT PROJECT, 99-AFC-7C
INTEGRATION OF NEW OR RE-POWERED GENERATING UNITS
WITH CAL-ISO

Dear Mr. Hanley:

To ensure the coordinated and reliable integration of new or re-powered generating units with California's electricity grid, generators are required to comply with the California Independent System Operator's (Cal-ISO) initial synchronization process. The Cal-ISO is currently formalizing this process by requesting that all organizations submit a letter to the Cal-ISO stating the proposed date of synchronization with the grid. The Cal-ISO must receive this letter at least one week before the new or re-powered generator initially synchronizes to the grid for testing.

In addition, the Cal-ISO is requesting that project owners provide telephone notification to the ISO Outage Coordination Department (916 351-2300, Monday through Friday between 7 a.m. and 3:30 p.m.) at least one business day before the generator initially synchronizes with the grid for testing.

To be consistent with this new Cal-ISO requirement, the California Energy Commission is processing an amendment for the Pastoria Power Plant Project, by adding a Condition of Certification to the Decision. As directed by the Governor's Executive Order D-25-01, concerning post-certification amendments, the Commission is expediting this modification. Energy Commission staff have concluded that this modification has no potential for adverse environmental or public health and safety impacts. Therefore, you are authorized to proceed with the Cal-ISO requirements as requested. A copy of this approval letter will be posted on the Energy Commission's website at www.energy.ca.gov. In addition, Commission staff will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse.

The following language for Condition of Certification TSE-4 will be added to the Pastoria Power Plant Project Decision.

TSE-4 The project owner shall provide the following Notice to the California Independent System Operator (Cal-ISO) prior to synchronizing the facility with the California Transmission system:

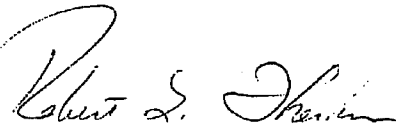
1. At least one week prior to synchronizing the facility with the grid for testing, provide the Cal-ISO a letter stating the proposed date of synchronization; and
2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the ISO Outage Coordination Department, Monday through Friday, between the hours of 7 a.m. to 3:30 p.m. at (916)-351-2300.

Verification: The project owner shall provide copies of the Cal-ISO letter to the CPM when it is sent to the Cal-ISO one week prior to initial synchronization with the grid. A report of conversation with the Cal-ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

If you have any comments or questions please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by email at ntronaas@energy.state.ca.us.

Thank you for your cooperation.

Sincerely,



ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



October 9, 2001

Mr. Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY, LLC
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Revisions to Conditions of Certification AQ-24 and AQ-27
Approval of Verification Changes AQ-25 and AQ-26

Dear Mr. Salzmann:

California Energy Commission (Energy Commission) staff reviewed your petition dated September 26, 2001, for the Pastoria Energy Facility, requesting a modification of air quality Conditions of Certification AQ-24 and AQ-27. The proposed modifications would allow emission reduction credits to be surrendered prior to the start of operation of the facility, rather than prior to the commencement of construction. You also requested that the verifications for AQ-25 and AQ-26 be modified accordingly.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we expedited review of the petition. Energy Commission staff concluded that the proposed project changes have no potential for adverse environmental or public health and safety impacts, and that these changes are consistent with the regulations of the San Joaquin Valley Air Pollution Control District. Therefore, the requested changes to the verifications of AQ-25 and AQ-26, and Conditions of Certification AQ-24 and AQ-27, as shown below, are approved.

APPROVED CHANGES TO VERIFICATIONS:

Deleted text is shown in ~~strikeout~~, new text is shown in underline.

AQ-25 Verification: "The project owner shall submit copies of the ERC surrendered to the CPM no later than 30 days prior to the commencement of ~~construction~~ operation."

AQ-26 Verification: "The project owner shall submit copies of ERC surrendered to the CPM no later than 30 days prior to the commencement of ~~construction~~ operation."

APPROVED CHANGES TO CONDITIONS OF CERTIFICATION:

"AQ-24 Prior to the commencement of ~~construction~~ operation the project owner shall surrender offsets for S-3636-1-0,...

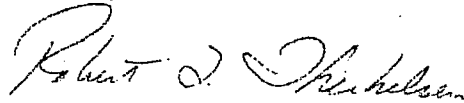
Verification: The project owner shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM ~~prior to~~ no later than 30 days prior to the commencement of construction operation."

"AQ-27 At least 30 days prior to commencement of construction operation, the the project owner shall provide the District....

Verification: The project owner shall submit copies of ERC surrendered to the CPM no later than 30 days prior to the commencement of construction operation."

A copy of this letter will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,



ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

cc: Raymond Rodriguez, PEF/Calpine
Seyed Sadredin, SJVAPCD
Mike Ringer, Energy Commission
Nancy Tronaas, Energy Commission

CALIFORNIA ENERGY COMMISSION

1518 NINTH STREET
SACRAMENTO, CA 95814-5512



January 7, 2002

Mr. Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY, LLC
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Modification to Anhydrous Storage Tanks
Revision to Condition of Certification Facility Design--GEN-2

Dear Mr. Salzmann:

California Energy Commission (Energy Commission) staff reviewed your petition dated December 26, 2001 for the Pastoria Energy Facility, requesting to modify the anhydrous ammonia storage from three 12,000 gal. tanks to two 24,000 gal. tanks. The petition states that this project change is necessary to improve facility operation and safety by reducing the number of anhydrous ammonia shipments, delivery handling time, and potential leaks.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we expedited review of the petition. Energy Commission staff concluded that the proposed project change has no potential for adverse environmental or public health and safety impacts. Therefore, the requested project change is approved, and Condition of Certification, Facility Design--GEN-2, Table 1, Major Equipment List, has been revised accordingly (enclosed). Facility Design--GEN-4 also has been revised to correct an error in the Commission Decision and Table 1, Major Equipment List, has been relocated to GEN-2 as referenced in the Decision.

A copy of this letter will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert L. Therkesen".

ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

Enclosure

cc: Raymond Rodriguez, PEF/Calpine
Nancy Tronaas, Energy Commission

Pastoria Energy Facility (99-AFC-7C)
Project Modification of Anhydrous Ammonia Storage Tanks

Deleted text is shown in ~~strikeout~~ and new text is shown in underline.

(Facility Design, GEN-2)

Table 1: Major Equipment List

Equipment/System	Quantity Plant	Size/ Capacity*	Remarks
Combustion Turbine (CT) Generator	3	168 MW each	Dry Low NO _x combustion control
Steam Turbine (ST)	2	185/90 MW	Single shaft HPT, IPT and LPT (2x1 configuration and 1x1 configuration)
Generators	5		Included with CT and ST
CT Inlet Air Filter	3	3,600,000 lb/hr	
Inlet Air Cooling	3		Evaporative/Refrigeration/Fogging
Fuel Gas Filter – Separator	3	150,000 lb/hr	
Turbo expander	1	230,000 lb/hr	
Heat Recovery Steam Generator (HRSG)	3	550,000 lb/hr	HP, IP, LP with reheat
HRSG Stack	3		18'-0" dia.x213' high
Catalytic CO Emission Control	3		Achieve BACT/LAER
Catalytic NO _x Emission Control	3		Achieve BACT/LAER
Ammonia Injection Skid	3		Two blowers per HRSG-alternate
Anhydrous Ammonia Storage Tank	3 2	12,000 gal 24,000 gal	Double walled tanks – alternate, for NO _x control
HP/IP HRSG feed-water pumps	6	1,700 gpm	HP with interstage bleed
Make-up Water Clarifier	1	5,6000 gpm	Gravity flow
Make-up Water Storage Tank	1	2,300,000 gal	Includes firewater storage
Demineralized Water Pumps	3	170 gpm	
Demineralized Water Treatment Package	1	350 gpm	
Demineralized Water Storage Tank	1	150,000 gal	
Condensate Pumps	5	1300 gpm	1 spare per condenser
Circulating Water Pumps	6	60,000 gpm/ 30,000 gpm	2x1 Configuration/1x1 Configuration
Wet Cooling Tower Banks	2	1,100mm BTU/hr / 600 mm BTU/hr	2x1 Configuration/1x1 Configuration
Fire Water Pump Skid	1	3,000 gpm	
Auxiliary Cooling Water Pumps	3	750 gpm	
Plant Air Compressors & Dryers	2	750 cfm	
Step-up Transformers	4	18/20 kV	To electrical grid
Emergency Backup Standby Generator	1	66 kW	Natural Gas Fired

*All capacities and sizes are approximate and may change during project final design.

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET

SACRAMENTO, CA 95814-6512



January 8, 2002

Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Verification Change AQ-2

Dear Mr. Salzmann:

The California Energy Commission (Energy Commission) staff has considered your December 10, 2001 request for an extension of the submittal timeframe for the design details of the continuous emission monitoring system (Condition of Certification AQ-2) and approves the change as described below (deleted text is shown in ~~striketrough~~ and new text is underlined):

"AQ-2 The project owner shall submit design details of continuous emissions monitoring system and XONON catalytic combustor system or selective catalytic reduction system and oxidation catalyst to the District at least 90 days prior [to] onsite delivery. [District Rule 2201]

Verification: The project owner shall provide copies of the drawings of the catalyst system chosen and the continuous emission monitor design detail to the CPM and the District at least ~~30 days prior to the construction of permanent foundations~~ 90 days prior to onsite delivery."

If you have any questions, please call me at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

A handwritten signature in cursive script that reads "Nancy Tronaas".

Nancy Tronaas
Compliance Project Manager

cc: Raymond Rodriguez, Pastoria Energy Facility/Calpine
Thomas Goff, San Joaquin Valley APCD
Joe Loyer, Energy Commission



CALIFORNIA ENERGY COMMISSION

1518 NINTH STREET
SACRAMENTO, CA 95814-5512

January 11, 2002

Mr. Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY, LLC
P.O. Box 866
Lebec, CA 93243-9998

SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Revisions to
Conditions of Certification AQ-17, -18, -19, -20, -24, and -26

Dear Mr. Salzmann:

California Energy Commission (Energy Commission) staff reviewed your petition dated September 28, 2001, for the Pastoria Energy Facility (PEF), requesting a modification of air quality Conditions of Certification AQ-17, -18, -19, -20, -24 and -26. The proposed modifications reflect lower nitrous oxides (NO_x) and particulate matter (PM₁₀) emission limits on an hourly, daily, and annual basis, and also revise the air emission offset package accordingly. Additionally, the petition states that PEF will not use an oxidation catalyst to control carbon monoxide (CO) and volatile organic compounds (VOC) emissions from the combustion turbines, but will instead achieve the same emission limits through good combustion practices.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we expedited review of the petition. On December 20, 2001, Energy Commission staff concluded that the proposed project changes have no potential for adverse environmental or public health and safety impacts, and that these changes are consistent with the regulations of the San Joaquin Valley Air Pollution Control District and the District concurs with the changes. Therefore, the changes to Conditions of Certification AQ-17, -18, -19, -20, -24, and -26 as shown below, are approved.

APPROVED CHANGES TO AIR QUALITY CONDITIONS OF CERTIFICATION:

Deleted text is shown in ~~strikeout~~, new text is shown in underline.

AQ-18 Emission rates from the CTG shall not exceed either of the following: PM₁₀ - ~~18.47~~9 lb/hr and SO_x (as SO₂) - 3.495 lb/hr. Emission limits are three-hour rolling averages.
[District Rules 2201 and 4001]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition AQ-39.

AQ-19 On any day when a startup or shutdown occurs, emission rates from CTG shall not exceed any of the following: PM10: 443-216 lb/day, SOx (as SO2): 84 lb/day, NOx (as NO2): 555-450 lb/day, VOC: 417-355 lb/day, and CO: 2113 lb/day.
[District Rule 2201]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition AQ-39.

AQ-20 Combined annual emissions from CTGs S-3636-1, 2 and 3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 447,660-233,900 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 410,859-344,485 lb/year, VOC - 244,275-227,619 lb/year, and CO - 1,220,166 lb/year.
[District Rule 2201]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition AQ-39.

AQ-24 Prior to the commencement of operation, the project owner shall surrender offsets for S-3636-1-0, 2-0, 3-0, 4-0 and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 - Q1: 412,738-57,674 lb, Q2: 413,991-58,315 lb, Q3: 415,244-58,956 lb, and Q4: 415,244-58,956 lb; SOx (as SO2) - Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) - Q1: 96,376-80,010 lb, Q2: 97,447-80,899 lb, Q3: 98,518-81,788 lb, and Q4: 98,518-81,788 lb; and VOC - Q1: 55,304-51,193 lb, Q2: 55,945-51,762 lb, Q3: 56,530-52,331 lb, and Q4: 56,529-52,331 lb.
[District Rule 2201]

Verification: The project owner shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to no later than 30 days prior to the commencement of operation.

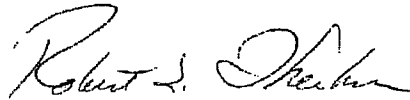
AQ-26 NOxSOx ERCs may be used to offset PM10 emission increases at a ratio of 2.422.9 lb NOxSOx : 1 lb PM10 for reductions occurring within 15 miles of this facility, and at 2.723.4 lb NOxSOx : 1 lb PM10 for reductions occurring greater than 15 miles from this facility.
[District Rule 2201]

Verification: The project owner shall submit copies of ERC surrendered to the CPM no later than 30 days prior to the commencement of operation.

Mr. Fred Salzman
Page 3
January 11, 2002

A copy of this letter will be posted on the Energy's Commission website at www.energy.ca.gov, and we will file a California Environmental Quality Act Notice of Decision with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert L. Therkelsen".

ROBERT L. THERKELSEN, Deputy Director
Systems Assessment & Facilities Siting

cc: Raymond Rodriguez, PEF/Calpine
Tom Goff, San Joaquin Vally APCD
Joe Loyer, Energy Commission
Nancy Tronaas, Energy Commission

CALIFORNIA ENERGY COMMISSION

16 NINTH STREET
SACRAMENTO, CA 95814-5512



January 31, 2002

Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY
P.O. Box 866
Lebec, CA 93243

Subject: Pastoria Energy Facility (99-AFC-7C)
Approval of Petition to Modify Transmission Towers

Dear Mr. Salzmann:

In accordance with the provisions of Title 20, California Code of Regulations, section 1769(a), California Energy Commission (Energy Commission) staff reviewed your petition dated November 28, 2001 requesting to increase the transmission tower height from 120 to 128 feet and to eliminate three transmission towers. Staff determined that the petition met the criteria of section 1769(a)(2), and mailed the enclosed "Notice of Insignificant Project Change" to the Energy Commission's post-certification project mailing list on January 16, 2002.

The Energy Commission did not receive any public comments regarding this requested project change within the 14-day public review period as specified in section 1769(a)(2). Therefore, your requested modification to the transmission towers is approved.

If you have any questions, please call me at (916) 654-3864, or e-mail me at ntronaas@energy.state.ca.us.

Sincerely,

Nancy Tronaas
Compliance Project Manager

Enclosure

cc: Raymond Rodriguez, PEF/Calpine
Greg Fenton, Kern County Engineering and Survey Services Department



CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512

STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

In the Matter of:	)	Docket No. 99-AFC-7C
	)	Order No. 02-0612-01(b)
PASTORIA ENERGY FACILITY)	
)	
Petition to Increase Cooling Tower PM ₁₀)	
Emissions	)	COMMISSION ORDER APPROVING
	)	PROJECT MODIFICATIONS
)	

On April 18, 2002, the Pastoria Energy Facility, LLC, submitted a Petition to allow a minor increase in cooling tower particulate matter (PM₁₀) emissions.

The Commission approves the proposed amendment and the proposed modified conditions in accordance with Title 20, section 1769(a)(3) of the California Code of Regulations.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed changes.
- B. The facility will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources code section 25525.
- C. The change will be beneficial to the project owner to by allowing for operation of the project in accordance with engineering design considerations.
- D. The proposed amendment reflects final cooling tower engineering design that was not available during the certification process.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts the following changes to the Pastoria Energy Facility Decision (added text is underlined, deleted text is shown as ~~striketrough~~):

CHANGES TO EXISTING CONDITIONS OF CERTIFICATION:

AQ-24 Prior to the commencement of construction, the project owner shall surrender offsets for S-3636-1-0, 2-0, 3-0, 4-0 and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 - Q1: ~~57,674~~ 58,305 lb, Q2: ~~58,315~~ 58,953 lb, Q3: ~~58,956~~ 59,601 lb, and Q4: ~~58,956~~ 59,601 lb; SOx (as SO2) - Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) - Q1: 80,010 lb, Q2: 80,899 lb, Q3: 81,788 lb, and Q4: 81,788 lb; and VOC - Q1: 51,193 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: 52,331 lb. [District Rule 2201]

Verification: The project owner shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to no later than 30 days prior to the commencement of construction.

AQ-55 PM10 emissions rate shall not exceed ~~17.4~~ 22.1 lb/day. [District Rule 2201]

Verification: Please refer to condition AQ 56.

AQ-58 Prior to operation the project owner shall surrender offsets for S- 3636-1-0, 2-0, 3-0, 4-0 and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 - Q1: ~~57,674~~ 58,305 lb, Q2: ~~58,315~~ 58,953 lb, Q3: ~~58,956~~ 59,601 lb, and Q4: ~~58,956~~ 59,601 lb; SOx (as SO2) - Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) - Q1: 80,010 lb, Q2: 80,899 lb, Q3: 81,788 lb, and Q4: 81,788 lb; and VOC - Q1: 51,193 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: 52,331 lb. [District Rule 2201]

Verification: The owner/operator shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to or upon startup of the CTGs or cooling tower.

AQ-64 PM10 emissions rate shall not exceed ~~8.7~~ 11.1 lb/day. [District Rule 2201]

Verification: Please refer to condition AQ 56.

AQ-67 Prior to operation the project owner shall surrender offsets for S- 3636-1-0, 2-0, 3-0, 4-0 and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1 PM10 - Q1: ~~57,674~~ 58,305 lb, Q2: ~~58,315~~ 58,953 lb, Q3: ~~58,956~~ 59,601 lb, and Q4: ~~58,956~~ 59,601 lb; SOx (as SO2) - Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) - Q1: 80,010 lb, Q2: 80,899 lb, Q3: 81,788 lb, and Q4: 81,788 lb; and VOC - Q1: 51,193 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: 52,331 lb. [District Rule 2201]

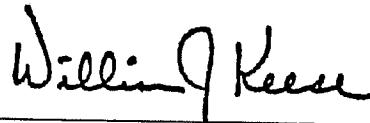
Verification: The owner/operator shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to or upon startup of the CTGs or cooling tower.

June 12, 2002
Page 3
Order No. 02-0612-01(b)

IT IS SO ORDERED.

Date: June 12, 2002

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

A handwritten signature in cursive script, reading "William J. Keese". The signature is written in dark ink and is positioned above a horizontal line.

WILLIAM J. KEESE
Chairman

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

In the Matter of:	)	Docket No. 99-AFC-7C
	)	Order No. 02-1211-03
PASTORIA ENERGY FACILITY)	
)	
Petition to Modify VIS-7--Plume	)	COMMISSION ORDER APPROVING
Abatement	)	PROJECT MODIFICATION

On June 3, 2002, the Calpine Corporation submitted a request to amend the Commission Decision for the Pastoria Energy Facility. The petition requests to eliminate the passive plume abatement system from the project's cooling tower design, and to delete visual resources Condition of Certification VIS-7.

At a regularly scheduled Business Meeting on December 11, 2002, the Commission considered staff's analysis and approved the request to eliminate the passive plume abatement system and approved staff's recommended revision to VIS-7 in accordance with Title 20, section 1769(a)(3) of the California Code of Regulations.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission finds that the previously-approved passive plume abatement system would not be effective in cooling tower plume reduction. The Energy Commission further finds that:

- A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed change.
- B. The facility will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources code section 25525.
- C. The change will be beneficial to the project owner by allowing for a practicable cooling tower design.
- D. There has been a substantial change since the Energy Commission certification based on new technical information concerning plume abatement systems not available during the siting process.

ORDER

The California Energy Commission hereby approves the elimination of the passive plume abatement system for the Pastoria Energy Facility, and orders the following changes to Pastoria Energy Facility Condition of Certification VIS-7:

REVISIONS TO EXISTING CONDITION OF CERTIFICATION

(Added text is underlined, deleted text is shown in ~~strikethrough~~.)

~~VIS-7 The project owner shall design and operate the project to mix dry ambient air with the saturated air exiting the cooling towers to prevent formation of plumes longer than 60 meters, higher than 60 meters, and wider than 30 meters.~~

~~The project owner shall develop and submit a plan to achieve this performance standard to the CPM for review and approval. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan.~~

~~The plan shall not be implemented until it is approved. The project owner shall notify the CPM when the plan has been implemented. At least 90 days before ordering any equipment to be used to limit the size of cooling tower plumes, the project owner shall provide the plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan. The project owner shall notify the CPM within seven days after implementing the plan.~~

VIS-7 The project owner shall ensure that the project's two cooling towers purchased are installed and operated as specified in the verification below.

Verification: At least 30 days prior to ordering the cooling towers, the project owner shall provide to the CPM for review and approval the final design specifications of the cooling towers. The project owner shall not order the cooling towers until notified by the CPM that the designs have been approved.

The project owner shall show, by providing confirming vendor specifications (either in draft purchase specifications to the vendor, or design specifications from the vendor), that the two cooling towers being purchased will meet the following specified design parameters:

	<u>Design Parameter Values</u>	
<u>Design Parameter</u>	<u>Four-Cell Cooling Tower</u>	<u>Eight-Cell Cooling Tower</u>
<u>Manufacturer</u>	<u>Marley Cooling Towers</u>	<u>Marley Cooling Towers</u>
<u>Model Number</u>	<u>F4108.5-6.0-04</u>	<u>F4108.5-6.0-08</u>
<u>Heat Load</u>	<u>149.81 MMBtu/hr/cell</u>	<u>148.75 MMBtu/hr/cell</u>

<u>Range</u>	<u>17°F</u>	<u>17°F</u>
<u>Water Flow Rate</u>	<u>17,625 gpm/cell</u>	<u>17,500 gpm/cell</u>
<u>Fan Model</u>	<u>384HP7-10</u>	<u>384HP7-10</u>
<u>Design L/G</u>	<u>1.348</u>	<u>1.3486</u>
<u>Exhaust Flow Rate</u>	<u>108,900 lb/min/cell</u>	<u>108,100 lb/min/cell</u>

The necessary design/vendor specifications shall also include: the physical size of the cooling towers, the fogging frequency curves for the cooling towers, and curve equations to determine the operating exhaust temperature based on the ambient temperature, relative humidity and heat rejection load condition.

The project owner shall provide a written certification in each Annual Compliance Report that the cooling towers have consistently been operated within the specified design parameters. If determined to be necessary to ensure operational compliance, based on legitimate complaints received or other physical evidence of potential non-compliant operation, the project owner shall monitor the cooling tower operating parameters in a manner and for a period as specified by the CPM. For each period that the cooling tower operation monitoring is required, the project owner shall provide to the CPM the cooling tower operating data within 30 days of the end of the monitoring period. The project owner shall include with this operating data an analysis of compliance and shall provide proposed remedial actions if compliance cannot be demonstrated.

IT IS SO ORDERED.

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

December 11, 2002
DATE

WILLIAM J. KEESE
Chairman

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512

March 8, 2004

Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY
P.O. Box 866
Lebec, CA 93243

Subject: Pastoria Energy Facility (99-AFC-7C)
Approval of Petition to Modify Natural Gas Pipeline Reroute 2B

Dear Mr. Salzmann:

In accordance with the provisions of Title 20, California Code of Regulations, section 1769(a), California Energy Commission (Commission) staff reviewed your petition received on February 9, 2004 requesting to reroute a 1.9 mile segment along the northern section of the natural gas pipeline to avoid impacts to endangered species habitat. Staff determined that the petition met the criteria of section 1769(a)(2), and mailed the enclosed "Notice of Insignificant Project Change" to the Energy Commission's post-certification project mailing list on February 20, 2004.

The Commission did not receive any public comments regarding this requested project change within the 14-day public review period as specified in section 1769(a)(2). Therefore, your requested modification is approved.

If you have any questions, please call me at (916) 654-3864 or e-mail me at ntronaas@energy.state.ca.us.

Sincerely,

Nancy Tronaas
Compliance Project Manager
Systems Assessment and
Facilities Siting Division

Enclosure

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET

SACRAMENTO, CA 95814-5512



March 17, 2004

99-AFC-7C

CALIF ENERGY COMMISSION

MAR 17 2004

RECEIVED IN DOCKETS

Fred Salzmann
Project Manager
PASTORIA ENERGY FACILITY
P.O. Box 866
Lebec, CA 93243

**SUBJECT: Pastoria Energy Facility (99-AFC-7C)
Approval of Petition to Reroute Natural Gas Pipeline Segment 2A
and Approval of Changes to Verifications for Soils & Water-1, -2, & -7**

Dear Mr. Salzmann:

In accordance with the provisions of Title 20, California Code of Regulations, section 1769(a), California Energy Commission (Commission) staff reviewed your petition received on February 17, 2004 requesting to reroute a two-mile segment along the southern section of the natural gas pipeline to avoid impacts to endangered species habitat.

Staff determined that the petition met the criteria of section 1769(a)(2), and mailed the enclosed "Notice of Insignificant Project Change" to the Commission's post-certification project mailing list on March 2, 2004. The Commission did not receive any public comments regarding this requested project change within the 14-day public review period as specified in section 1769(a)(2). Therefore, your requested modification is approved.

Prior to commencing construction of pipeline segment 2A, you are required to provide the Commission with all applicable preconstruction compliance documents, including a revised Nationwide 404 or a letter of nonjurisdiction from U.S. Army Corps of Engineers (BIO-7), an amended Calif. Dept. of Fish and Game Streambed Alteration Agreement (BIO-8), and a revised Central Valley Regional Water Quality Control Board (RWQCB) 401 certification or other permit as deemed needed by the RWQCB (S&W-7 and BIO-9).

Additionally, in accordance section 1770(d), Commission staff determined that reporting requirements must be revised in order to assure that this project modification will comply with applicable laws, ordinances, regulations, and standards. The revisions will require the project owner to provide the Compliance Project Manager with updates on implementation of drainage, erosion, and sediment controls in each monthly compliance report during construction, as well as updates on the success of habitat restoration activities after construction of the pipeline is completed.

Therefore, Commission staff approves the following revisions to the "verifications" for Conditions of Certification Soil & Water -1, -2, and -7. New text is underlined.

SOILS&WATER 1: Prior to beginning any clearing, grading or excavation activities associated with construction of any project element, the project owner shall obtain Energy Commission staff approval for a Storm Water Pollution Prevention Plan as required under the General Stormwater Construction Activity Permit for the project.

Verification: No later than 30 days prior to the start of any clearing, grading or excavation activities associated with the construction of any project element, the project owner will submit a copy of the Storm Water Pollution Prevention Plan to the Compliance Project Manager (CPM) for review and approval. Verification of approval by the Kern County Engineering and Survey Services Department/Floodplain for the disposal of site drainage water will be included with the SWPPP. Approval of the plan by the CPM must be received prior to the initiation of any clearing, grading or excavation activities associated with construction of any project element. During construction of the natural gas pipeline, include a summary in the Monthly Compliance Report of the actions taken to implement all drainage, erosion and sediment control measures described in the project's "Construction Storm Water Pollution Prevention and Erosion Control and Site Revegetation Plan: Supplement for Natural Gas Supply Pipeline Reroutes (Segments 2A and 2B)", dated February 2004.

SOILS&WATER 2: Prior to beginning any clearing, grading or excavation activities associated with construction of any project element, the project owner shall obtain Energy Commission staff approval for a final erosion control and revegetation plan that addresses all project elements. The final plan to be submitted for staff's approval shall contain all the elements of the draft plan with changes made to address any staff comments and the final design of the project.

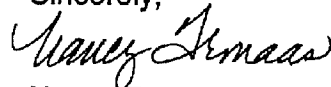
Verification: The erosion control and revegetation plan shall be submitted to the CPM no later than 30 days prior to the start of any clearing, grading, or excavation activities. Approval of the final plan by the CPM must be received prior to the initiation of any clearing, grading or excavation activities associated with construction of any project element. After completion of construction of the natural gas pipeline and for three years thereafter, include a Restoration Report in the Annual Compliance Report. This report shall discuss the status of the soils stabilization and revegetation or restoration activities as described in the project's "Construction Storm Water Pollution Prevention and Erosion Control and Site Revegetation Plan: Supplement for Natural Gas Supply Pipeline Reroutes (Segments 2A and 2B)", dated February 2004. A final restoration report shall be submitted after required restoration of the natural gas pipeline has been completed.

SOIL&WATER 7: Prior to the initiation of any clearing, grading or excavation activities associated with any project element, the project owner shall obtain a Section 401 Certification from the Central Valley RWQCB.

Verification: No later than 30 days prior to the start of any clearing, grading or excavation activities associated with any project element, the project owner shall submit to the Energy Commission CPM a copy of the Section 401 Certification from the Central Valley RWQCB for the PEF. The project owner shall submit copies to the CPM of all correspondence between the project owner and the RWQCB and the Army Corps of Engineers regarding applicable permit(s) for the rerouting of the gas pipeline (Segments 2A and 2B) within 10 days of its receipt (when the project owner receives correspondence from the RWQCB) or within 10 days of its mailing (when the project owner sends correspondence to the RWQCB). This information shall include copies of the complete applications and executed permit(s).

The above changes are effective immediately. If you have any questions or need further clarification, please call me at (916) 654-3864, or by e-mail at ntronaas@energy.state.ca.us.

Sincerely,



Nancy Tronaas
Compliance Project Manager

Attachment

cc: Brian Erlandson, CRWQCB
Clarence Mayott, CDFG
Shannon Holbrook, USFWS
Matt Hirkala, USACOE
Stuart Itoga, CEC
Lorraine White, CEC

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:

PASTORIA ENERGY FACILITY	)	Docket No. 99-AFC-7C
	)	Order No. 04-1215-04
)	
PASTORIA ENERGY FACILITY, LLC	)	ORDER APPROVING A TEMPORARY
	)	INCREASE IN EMISSIONS DURING
	)	COMMISSIONING
)	
)	

The Pastoria Energy Facility, LLC, a wholly-owned affiliate of the Calpine Corporation and owner of the Pastoria Energy Facility, filed a petition on September 15, 2004, requesting a temporary increase in nitrogen oxides and carbon monoxide emissions during the commissioning phase that will include steam blows, tuning, and testing of all equipment prior to commercial electrical generation. The San Joaquin Valley Air Pollution Control District approved a variance allowing for this temporary increase in emissions on October 13, 2004.

STAFF RECOMMENDATION

The Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of Calpine's petition to modify the Pastoria Energy Facility and recommends approval of new air quality conditions of certification AQ-87 and -88.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications.
- The modification will not change the findings in the Commission's Final Decision pursuant to Title 20, section 1755.
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;

- The change will be beneficial to the project owner by allowing for operational efficiency during the commissioning phase; and
- There has been a substantial change since the Energy Commission certification based on the project owner's re-evaluation of operational information that was not available during the siting process.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts staff's recommendations and approves the following changes to the Pastoria Energy Facility's Decision.

NEW AIR QUALITY CONDITIONS OF CERTIFICATION

New text is underlined:

AQ-87 Relief granted by the San Joaquin Valley Unified Air Pollution Control District Hearing Board on October 13, 2004 in Regular Variance Docket No. S-04-48R and Docket No. S-04-49R shall apply to Conditions of Certification AQ-4, AQ-12, AQ-14 through AQ-17, AQ-19, AQ-24, AQ-28 through AQ-30 and AQ-37. The Project Owner shall comply with all requirements and conditions incorporated into these regular variances.

Verification: The Project Owner shall submit copies of all notifications and reports required under these regular variances to the CPM. The Project Owner shall notify CPM within 5 days of any requested changes to these variances.

AQ-88 During the commissioning periods of both Power Block I and Power Block II, emission rates from each CTG shall not exceed 308 lbs/hour of NOx and 2,527 lbs/hour of CO, and the combined emission rates from all three CTGs shall not exceed 342 lbs/hour of NOx and 2,577 lbs/hour of CO.

Verification: The Project Owner shall provide, within 24 hours of occurrence, notification to the CPM of any noncompliance with the commissioning emission limits. The Project Owner shall provide the CPM with copies of any emission reduction credit certificates that are surrendered to the District for excess NOx emissions.

IT IS SO ORDERED.

Date: December 15, 2004

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

WILLIAM J. KEESE, Chairman

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:

PASTORIA ENERGY FACILITY	)	Docket No. 99-AFC-7C
	)	Order No. 04-1215-03
)	
)	
PASTORIA ENERGY FACILITY, LLC	)	ORDER APPROVING MODIFICATIONS
	)	TO THE EMISSION REDUCTION
	)	OFFSET PACKAGE AND OTHER
	)	CHANGES THAT AFFECT AIR QUALITY
	)	CONDITIONS OF CERTIFICATION

The Pastoria Energy Facility, LLC, a wholly-owned affiliate of the Calpine Corporation and owner of the Pastoria Energy Facility, filed a petition on March 22, 2004, requesting to: modify the emission reduction credit offset package to clarify assignment of offsets between the Pastoria Energy Facility and the San Joaquin Valley Energy Center, revise the calculation procedure to determine the appropriate SO₂ for PM₁₀ interpollutant offset ratio for consistency with the San Joaquin Valley Air Pollution Control District's (District) procedures, clarify the ammonia slip monitoring parameters, and revise several air quality conditions of certification for conformity with the air district's permits, and correct administrative errors.

The District will approve a Revised Determination of Compliance in December 2004.

STAFF RECOMMENDATION

The Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of Calpine's petition to modify the Pastoria Energy Facility and amend related Conditions of Certification.

COMMISSION FINDINGS

Based on staff's analysis, the Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Commission finds that:

- o The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications.

- The modification will not change the findings in the Commission's Final Decision pursuant to Title 20, section 1755.
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- The modification will be beneficial to the project owner because it will clarify the assignment of emission reduction credit offsets along with emission monitoring parameters for conformity with the District's permits; and
- The change is based on information that was not available to the parties prior to Commission certification because the issue of assignment of offsets was an outcome of staff evaluation of a subsequent project.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Pastoria Energy Facility's Decision. New text is underlined and deleted text is shown in ~~strikeout~~:

AQ-6 ~~CTG~~ The Heat Recovery Steam Generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitor (CEM) for NO_x, CO, and O₂. ~~If SCR-NO_x control system is used, CTG shall be equipped with an additional CEM for NO_x ahead of the SCR unit, or, alternatively, a continuously recording ammonia monitor.~~ All CEMS shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F ~~(for CO)~~, and 40 CFR Part 75 ~~(for NO_x and O₂)~~, and shall be capable of monitoring emissions during ~~startups and shutdowns as well as normal operating conditions, and during~~ startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdowns specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions **AQ-15, AQ-19 & AQ-20**. [District Rule 2201]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission.

AQ-20 Combined annual emissions from CTGs S-3636-1, 2 and 3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following; PM₁₀ – 224,343,233,900 lb/year, SO_x (as SO₂) – 84,780 lb/year, NO_x (as NO₂) – 344,484,344,485 lb/year, VOC – 227,619 lb/year and CO – 1,220,166 lb/year. [District Rule 2201]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of **Condition AQ-39**.

AQ-24 Prior to operation the project owner shall surrender offsets for S-3636-1-0, 2-0, 3-0, 4-0, and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 – Q1: 58,305 lb, Q2: 58,953 lb, Q3: 59,601 lb, and Q4: ~~59,602~~~~59,604~~ lb; SOx (as SO2) – Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) – Q1: 80,010 lb, Q2: 80,899 lb, Q3: ~~81,788~~ 81,787 lb, and Q4: 81,788 lb; and VOC – Q1: ~~51,193~~ 51,194 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: ~~52,334~~ 52,332 lb. [District Rule 2201]

Verification: ~~The project owner shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to no later than 30 days prior to the commencement of operation.~~ No later than 30 days prior to the commencement of operation, the project owner shall submit to the CPM copies of ERCs surrendered to the SJVUAPCD in the totals shown.

AQ-26 SOx ERCs may be used to offset PM10 emission increases at a ratio of ~~2.93~~ 1 lb SOx ÷ for each 1 lb PM10 emissions for SOx reductions occurring within 15 miles of this facility; and at a ratio of 3.4 lb SOx ÷ for each 1 lb PM10 emissions for SOx reductions occurring greater than 15 miles from this facility. A different SOx/PM10 ratio may be used upon concurrence of the federal EPA and the District. [District Rule 2201]

Verification: ~~The project owner shall submit copies of ERC surrendered to the CPM no later than 30 days prior to the commencement of operation.~~ No later than 30 days prior to the commencement of operation, the project owner shall submit to the CPM copies of ERCs surrendered, and if the SOx/PM10 ratio(s) used are different than those specified above. The project owner shall in the same submittal provide the CPM with documentation showing federal EPA and District concurrence with the SOx/PM10 ratio used.

AQ-30 Compliance with the startup NOx, CO, and VOC mass emission limits shall be demonstrated from one of the CTGs (S-3636-1, 2, or 3) upon initial operation and at least every seven years thereafter by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 1081]

Verification: The project owner shall provide records of compliance as part of Condition AQ-33.

AQ-58 Prior to operation the project owner shall surrender offsets for S-3636-1-0, 2-0, 3-0, 4-0, and 5-0, for all calendar quarters in the following amounts, at the offset

ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 – Q1: 58,305 lb, Q2: 58,953 lb, Q3: 59,601 lb, and Q4: ~~59,602~~~~59,601~~ lb; SOx (as SO2) – Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) – Q1: 80,010 lb, Q2: 80,899 lb, Q3: ~~81,788~~ 81,787 lb, and Q4: 81,788 lb; and VOC – Q1: ~~51,193~~ 51,194 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: ~~52,331~~ 52,332 lb. [District Rule 2201]

Verification: The owner/operator shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM prior to or upon startup of the CTGs or cooling tower. No later than 30 days prior to the commencement of operation, the owner/operator shall submit to the CPM copies of ERCs surrendered to the SJVUAPCD in the totals shown.

AQ-67 Prior to operation the project owner shall surrender offsets for S-3636-1-0, 2-0, 3-0, 4-0, and 5-0, for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 – Q1: 58,305 lb, Q2: 58,953 lb, Q3: 59,601 lb, and Q4: ~~59,602~~~~59,601~~ lb; SOx (as SO2) – Q1: 20,905 lb, Q2: 21,137 lb, Q3: 21,369 lb, and Q4: 21,369 lb; NOx (as NO2) – Q1: 80,010 lb, Q2: 80,899 lb, Q3: ~~81,788~~ 81,787 lb, and Q4: 81,788 lb; and VOC – Q1: ~~51,193~~ 51,194 lb, Q2: 51,762 lb, Q3: 52,331 lb, and Q4: ~~52,331~~ 52,332 lb. [District Rule 2201]

Verification: The owner/operator shall submit copies of ERC surrendered to the SJVUAPCD in the totals shown to the CPM no later than 30 days prior to the commencement of operation, prior to or upon startup of the CTGs or cooling tower.

AQ-89 The HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NOx concentration for the purposes of calculating ammonia slip. Project owner shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-calibration. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-calibration. If the analyzer is out-of-calibration, the project owner shall take appropriate corrective action and then repeat the CD check. [District Rule 2201]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Energy Commission.

AQ-90 ERC Certificate Numbers S-1554-2, C- 375-2, C-376-2, N-195-2 (or certificates split from these certificates) shall be used to supply the required NOx offsets, ERC Certificate Number S-1549-1 (or a certificate split from this certificate) shall be used to supply the required VOC offsets and ERC Certificate Number N-270-5 (or a certificate split from this certificate) shall be used to supply the required SOx

and PM10 offsets, unless a revised offsetting proposal is received and approved by the Energy Commission [District Rule]

Verification: The project owner shall submit copies of the surrendered ERC certificates to the CPM no later than 30 days prior to the commencement of operation.

IT IS SO ORDERED.

Date: December 15, 2004

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

WILLIAM J. KEESE, Chairman